

What is claimed is:

1. A flat sealing ring (1) for producing a fluid-tight coupling of two surfaces which are to be sealed against one another by means of a contact force, the ring (1) having an elastically deformable base ring (2), wherein a stiffening ring (3, 3', 3'') is provided at at least one of the inner circumferential edge of the base ring (2) or the outer circumferential edge of the base ring (2), wherein the stiffening ring, at least perpendicularly to the ring plane, has a lesser deformability, or greater firmness, than the base ring (2), and wherein the height of the stiffening ring perpendicularly to the ring plane is less than the greatest height of the base ring (2) perpendicularly to the ring plane.
2. A flat sealing ring according to claim 1, wherein the stiffening ring (3, 3', 3'') comprises plastic or metal.
3. The sealing ring according to claim 1 wherein the stiffening ring is made of metal.
4. The sealing ring according to claim 1 wherein the stiffening ring is made of stainless steel.
5. A flat sealing ring according to claim 1 wherein the base ring has a core of elastically deformable material (6) and at least one protective layer (4), at least in portions, on the elastically deformable material of the core.

6. A flat sealing ring according to claim 2 wherein the base ring has a core of elastically deformable material (6) and at least one protective layer (4), at least in portions, on the elastically deformable material of the core.
7. A flat sealing ring according to claim 3 wherein the base ring has a core of elastically deformable material (6) and at least one protective layer (4), at least in portions, on the elastically deformable material of the core.
8. A flat sealing ring according to claim 4 wherein the base ring has a core of elastically deformable material (6) and at least one protective layer (4), at least in portions, on the elastically deformable material of the core.
9. A flat sealing ring according to claim 5, wherein the at least one protective layer (4) is produced from a chemically resistant material.
10. A flat sealing ring according to claim 6, wherein the at least one protective layer (4) is produced from a chemically resistant material.
11. A flat sealing ring according to claim 7, wherein the at least one protective layer (4) is produced from a chemically resistant material.
12. A flat sealing ring according to claim 8, wherein the at least one protective layer (4) is produced from a chemically resistant material.

13. A flat sealing ring according to claim 5 wherein the at least one protective layer (4) is produced from a fluoropolymer.
14. A flat sealing ring according to claim 6 wherein the at least one protective layer (4) is produced from a fluoropolymer.
15. A flat sealing ring according to claim 5 wherein the at least one protective layer (4) is produced from polytetrafluoroethylene (PTFE).
16. A flat sealing ring according to claim 6 wherein the at least one protective layer (4) is produced from polytetrafluoroethylene (PTFE).
17. A flat sealing ring according to claim 5 wherein the stiffening ring (3, 3', 3'') and the protective layer (4) are produced as a single piece from the same material.
18. A flat sealing ring according to claim 6 wherein the stiffening ring (3, 3', 3'') and the protective layer (4) are produced as a single piece from the same material.
19. A flat sealing ring according to claim 7 wherein the stiffening ring (3, 3', 3'') and the protective layer (4) are produced as a single piece from the same material.

20. A flat sealing ring according to claim 8 wherein the stiffening ring (3, 3', 3'') and the protective layer (4) are produced as a single piece from the same material.